

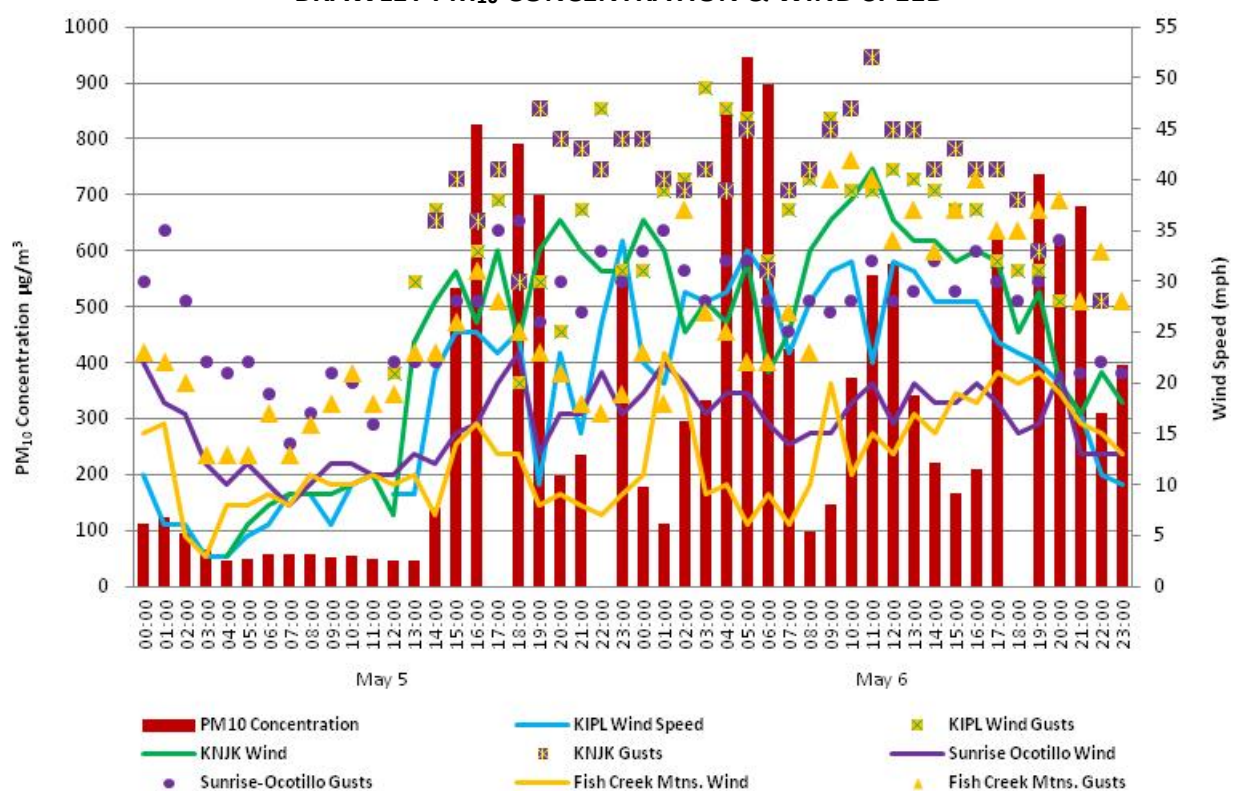
## Appendix C

### Correlated PM<sub>10</sub> Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds<sup>1</sup> and PM<sub>10</sub> concentrations at select monitoring sites within the Salton Sea Air Basin on May 5, 2014 and May 6, 2014. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

#### IMPERIAL COUNTY MONITORING SITES (Figures C-1 to C-2)

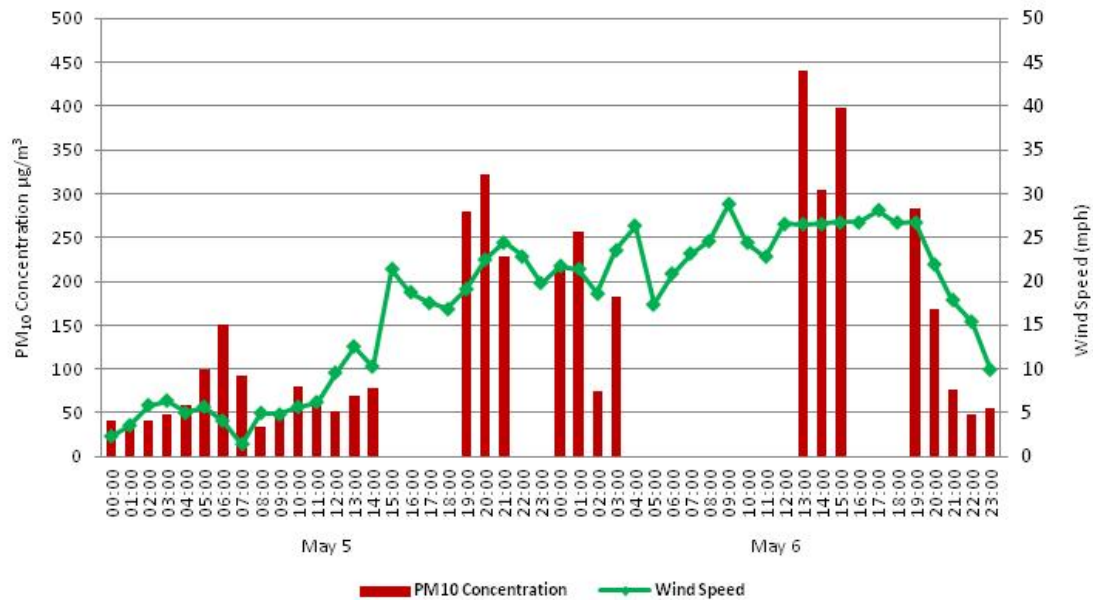
**FIGURE C-1**  
**BRAWLEY PM<sub>10</sub> CONCENTRATION & WIND SPEED**



**Fig C-1:** The Brawley FEM monitor experienced increases in hourly PM<sub>10</sub> concentrations shortly after upstream wind sites recorded increases in wind speed and gusts. Air quality data from the EPA's AQS data bank and wind data from the NCEI's QCLCD data bank and the University of Utah's MesoWest data bank

<sup>1</sup> National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); <http://w1.weather.gov/glossary/index.php?letter=w>

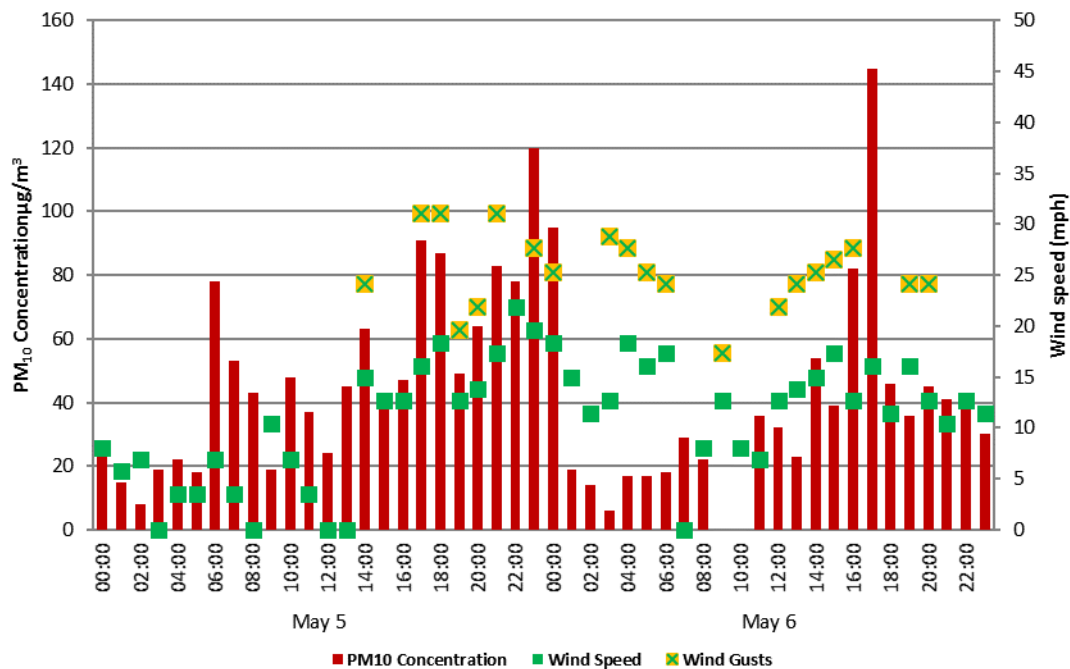
**FIGURE C-2**  
**NILAND PM<sub>10</sub> CONCENTRATION & WIND SPEED**



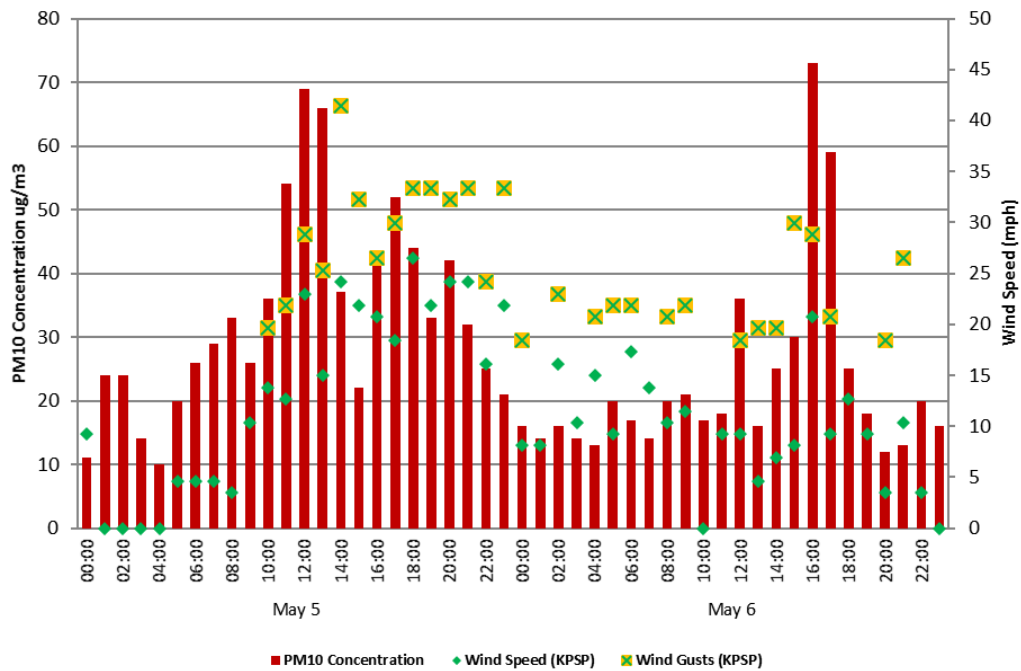
**Fig C-2:** The Niland FEM monitor experienced an increase in PM<sub>10</sub> levels shortly after increases in wind speeds. Air quality and wind data from the EPA's AQS data bank

### RIVERSIDE COUNTY MONITORING SITES

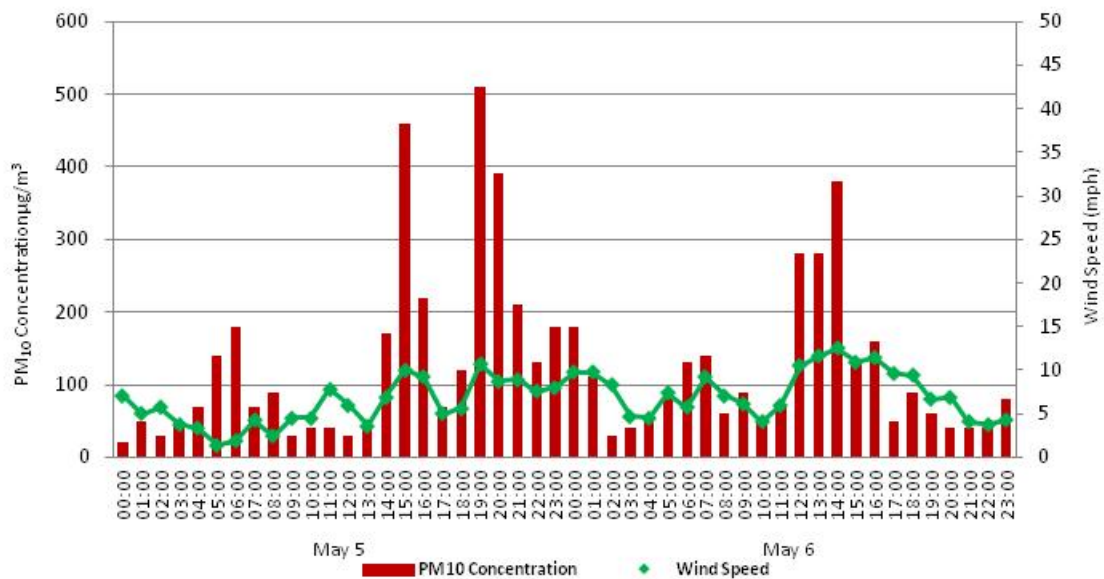
**FIGURE C-3**  
**INDIO (JACKSON ST) PM<sub>10</sub> CONCENTRATION & WIND SPEED**



**FIGURE C-4**  
**PALM SPRINGS FIRE STATION PM<sub>10</sub> CONCENTRATION & WIND SPEED**



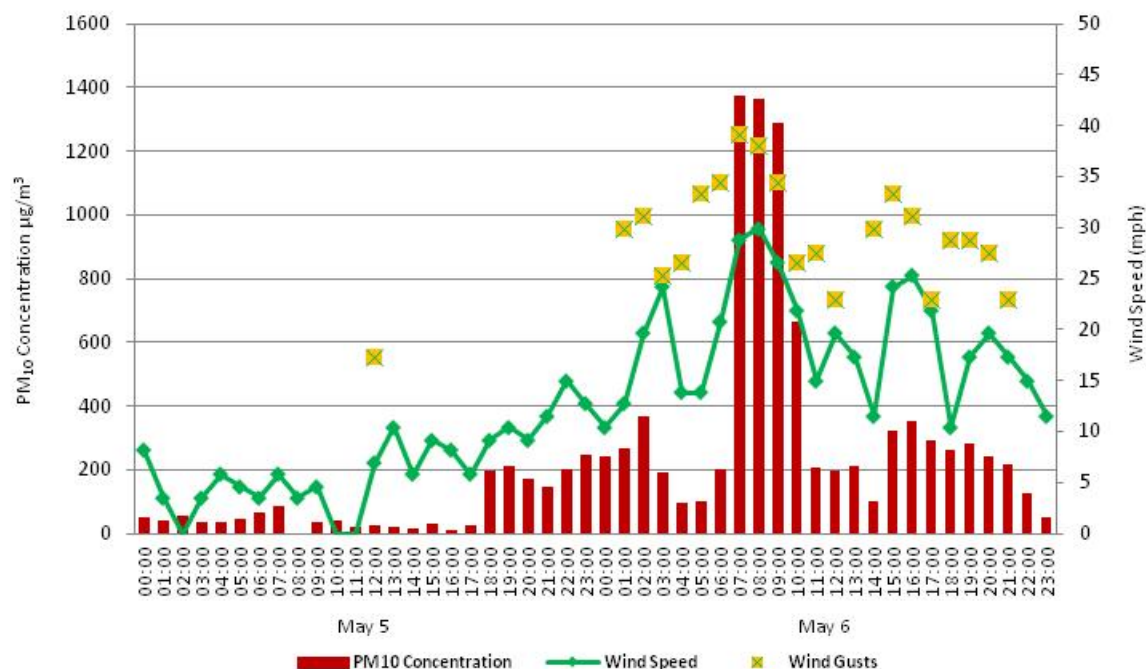
**FIGURE C-5**  
**TORRES-MARTINEZ TRIBAL PM<sub>10</sub> CONCENTRATION & WIND SPEED**



**Figs C-3 through C-5:** Monitoring sites northwest of Westmorland and Brawley in Riverside County saw corresponding increases in particulate matter as wind speed increased during the day on May 5, 2014 and May 6, 2014. Air quality data from the EPA's AQS data bank with wind data from the NCEI's QCLCD data bank, Torres-Martinez wind data from the EPA's AQS data bank

## YUMA ARIZONA SITE

**FIGURE C-6**  
**YUMA ARIZONA SUPERSITE PM<sub>10</sub> CONCENTRATION & WIND**



**Fig C-6:** The strong winds that swept through Imperial County were strong enough to impact downstream monitors as far away as Yuma, Arizona. Wind data is from Yuma MCAS (KNYL), taken from the University of Utah's MesoWest data bank. Air quality data from the EPA's AQS data bank